

EZ-KEYS. A REVIEW

by Bill Gaskill - Topics - LA 99ers, CA - Apr '88

EZ-KEYS is a new product from Asgard Software, designed with the Extended Basic programmer or Extended Basic program user in mind. To use it one must have Extended Basic, 32K memory expansion, and a disk drive. The program retails for \$14.95 and is currently available directly from Asgard Software or TENEX Computer Express. I am certain it will be available from other major 99/4A retailers in the near future.

A MACRO GENERATOR

EZ-KEYS is one of three keyboard generators I know of available for the 99/4A owner. PC-KEYS II, from Techni-Graphics, and SoftKeys from Quality 99 Software, are the other two. The fact that all three programs could be generically grouped into the "macro" development classification is really about all that they have in common. PC-KEYS II offers disk cataloging, a pop-up notepad, a pop-up calendar, and user-definable/selectable screen dump capability, along with the ability to define a limited number of "hot-keys" that perform common functions with one keystroke. SoftKeys is basically a "hot-key" macro generator without all of the added features of PC-KEYS II or the additional cost.

EZ-KEYS takes a different approach to the concept of macro generation. It too allows you to define "hot-keys", but the keys you define can do such, such more than either of the other two programs. In fact, by my definition, EZ-KEYS is really the only true macro generator of the three. In my experience as a user of "other" computers, macros are short programs that "remember" keystrokes for you, so you can later call them up at the press of a single key. In other words, they are time savers that shorten the number of steps you have to go through to perform a desired function or series of functions.

On all of the MS-DOS macro generators I have used, macro files are built in one of two ways. One method is to use a "remember" mode that tracks and then saves keystrokes as you press them and another method is to provide a macro editor that allows you to write and save small files containing the desired keystrokes. EZ-KEYS is of the second type. Instead it provides a macro editor that appears at the press of a single key.

EZ-KEYS allows up to 55 keys to be defined for macro use, with each macro capable of being 648 characters (about 7/8 of a screen) in length. Perhaps the neatest feature of EZ-KEYS is its ability to link macros together. This means one macro file can RUN another, thus providing almost unlimited potential to the utility the EZ-KEYS environment can offer the IB programmer or user. EZ-KEYS also RUNS Extended Basic programs or parts of IB programs.

For instance, if you wished to have a disk cataloging program available at the touch of a key, you could write it in Extended Basic, LIST it to disk so it is SAVED in DV/DO format, then define a macro for it. In fact, such a program is provided on the EZ-KEYS disk.

Programming a macro is simple if you are creating simple macros. It can become quite complex and demanding if you really want to build some sophisticated applications. Saving a macro is simple and straightforward. You simply define it in the Macro Editor, exit out of the editor, do a BYE at the READY prompt and then load the program again. You will immediately be given the option of loading or saving your macros. When you save them, all macros that exist in memory are saved to disk for use any time the EZ-KEYS environment is loaded.

To use your macros in a RUNNING program environment you simply edit a line in the EZ-KEYS program so it RUNS the first program you want to activate, then you must save the EZ-KEYS program as LOAD. When the EZ-KEYS LOAD program is read into memory it brings all of your macro definitions with it, then RUNS your first program. That's it! No programming expertise required here, just a user-friendly common sense approach to interfacing with your IB program(s).

Extended Basic programs that use assembly language subroutines may also be used with EZ-KEYS. The author has included an EZLOADER that will allow you to save custom routines and your macros all together. Assembly routines are loaded first, then your macros so they do not conflict with the subroutines already in low-memory. The whole package is then saved as a memory-image file and can be called up whenever you use the application with the custom assembly routines. The really neat thing here is the ability to customize the EZ-KEYS environment to fit as many different uses or programs as you have.

A PROGRAMMING UTILITY

EZ-KEYS is an assembly language coded program, designed to operate in an Extended Basic environment. Aside from its ability to generate macros it also provides a set of utilities for the Extended Basic programmer. While in the command mode (at the READY prompt) in IB EZ-KEYS allows you to set a timer that will automatically SAVE your work in case of a power failure or interruption. The time intervals can be from 0 to 18 minutes apart and two files, BACKUP1 and BACKUP2 are used to save your work. All worked is saved only to BSK1. Another option allows the setting of background and foreground colors in the programming environment, such the same as the Grackracker Utilities or John Johnson's Horizon RAM Disk menu allow. Colors may also be set for the Macro Editor and the special characters displayed in a macro file.

Another routine will highlight numbers and arithmetic operators so they appear on screen in the reverse color of the background and foreground colors chosen. When a running program is being used you may also set all character sets to the same color by linking to a routine named RCOLOR.

Although the manual cautions Extended Basic might not always be able to interpret it, EZ-KEYS lets you write a

single program line that can be 23 screen lines long. How's that for expanding the capabilities of Extended Basic? Additionally, you can press Function 7 or Function 6 to move the cursor directly between program lines while in the programming (immediate) mode.

You may also write macro files in the TIW Editor, in a manner similar to writing a .BAT file for the GENEVE or any MS-DOS machine. The author included a customized CHARA1 file to use on your TI-Writer disk. This file contains the character definitions needed to display the special characters that represent specific macro functions. This is another example of the forethought put into this program. I would guess few first-time users would opt for this method of development though, since it requires the use of the Transliterate Mode in TI-Writer and is only sparsely documented in the EZ-KEYS manual. There is a chart in the documentation that shows the various equivalents that are available.

Once you have created the macro file you simply print it to disk, run the POKER program provided on the EZ-KEYS disk, and the macro file is then assigned as a macro definition.

If EZ-KEYS has a shortcoming it is in the method used to call macros from a RUNNING IB program. The cursor must be displayed on screen for a macro to be accessed. You cannot, for instance, access a macro when the program being RUN is looping at a CALL KEY statement. Once the file instructions within a macro have been set in motion they are suspended only by a "hold" command in the macro (a Ctrl H). So you must have programmed a Control H in the macro file so it appears at the proper point in your IB program. This can be tricky and a little confusing to the novice programmer. I would have rather seen an execution routine used that could be called at any time.

One curious oversight in the EZ-KEYS program involves character definitions. A custom character set is used in the macro generator and is not reset when an IB program is used. You end up with a couple of lower case letters out of line with the standard TI character set in your running IB program. While this is easily overcome by restoring the offending characters with CALL CHAR statements in the program you are running, it would be nice to see EZ-KEYS take care of this for you. It is one less than professional aspect of a program that is otherwise truly representative of "commercial" quality software.

EASE OF USE

While creating macros is not in the suggested domain for a new programmer, setting up the EZ-KEYS program to use macros is. More detailed documentation is needed to help the less adventuresome wade through the rigors of complex macro development.

DOCUMENTATION

The documentation is adequate for simple macro definitions, but falls short of being a complete tutorial for the advanced macro programmer. It covers most of the "absolute" of macro development in the EZ-KEYS environment, but stops short of really being a useful guide to the advanced macro developer. However, in fairness to Asgard Software, it's difficult to offer such an outstanding product and couple it with outstanding documentation for \$14.95. The documentation is well

written and understandable, an important consideration for any new software purchase. If EZ-KEYS is a success Asgard will develop follow-up products for it such as a disk of predefined macros or a tutorial on advanced macro programming.

VALUE

Harry Wilhelm is the author of EZ-KEYS. I know nothing about Mr. Wilhelm nor do I recall ever reading his name in any of the many 99/4A publications. After seeing the product he has produced, I hope he continues to write programs for the 99/4A (and hopefully the 9640). If future Wilhelm applications are anything like EZ-KEYS, we are all in for a treat. EZ-KEYS is a superb first-release application. It is well thought out, professionally executed and virtually error free. For the adventuresome programmer or user EZ-KEYS promises unlimited potential and utility. It is truly a professional application that needs only more complete documentation and some fine tuning to push it into the "stellar" software class. If you don't have EZ-KEYS you should buy it. You won't regret the meager \$14.95 investment. Even if you do not use it to do ANY macro development of your own, you will likely find another, perhaps more important, use for it. I would not be surprised to see future IB type applications developed under the EZ-KEYS environment. It is truly a powerful development tool that cries out for an imaginative programmer to come along and demonstrate some of its potential. With the right combination of good marketing, dependable customer support and continued development of the product, EZ-KEYS could become a standard among 99/4A users. It is THAT GOOD! It is only in its infancy in version 1.0. I am sure the best is yet to come.

FINAL GRADE

You will note EZ-KEYS falls down to a "B" rating in some categories. In the PERFORMANCE area I knocked it down because of the less than flexible method used to call up a macro and the program's inability to suspend macro operations more effectively. In the EASE OF USE area I took some points away because of the complexities required to design more than just simple macros. The DOCUMENTATION lost points because of brevity and several typos that snuck into the final product. The VALUE category makes up for all of the little shortcomings I found in this first release. It is the "missing link" that we have been looking for in seeking more of the 99/4A than just a single purpose machine. For \$14.95 you simply can't go wrong. If the TI Community supports EZ-KEYS like it deserves, I am confident the incentive will be present for Harry Wilhelm to continue development of the product. I am equally certain other talented programmers will develop applications to run in the EZ-KEYS environment. The end result to our support of this product is sure to be an even better product in the future.

REPORT CARD:

Performance.....B
Ease Of Use.....B
Documentation....B
Value.....AAA
FINAL GRADE.....A